

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Byeong-chan Lee et al.

Serial No.: 10/722,193

Filed: November 26, 2003

For: INTEGRATED CIRCUIT DEVICES HAVING BURIED INSULATION LAYERS
AND METHODS OF FORMING THE SAME

Confirmation No.: 6744

November 5, 2004

Mail Stop Petitions
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

**PETITION TO GRANT A FILING DATE FOR A COMPLETE NON-PROVISIONAL
APPLICATION**

Sir:

In response to the Notice of Incomplete Non-Provisional Application, Applicant hereby petitions to assign the filing date of November 25, 2003, for the above-identified patent application as this was the date the Application (including the 20 formal drawing sheets) was deposited as "Express Mail" in the U.S. Postal Service (USPS). The following is enclosed as evidence of November 25, 2003 being the filing date for the application which was properly filed under 37 C.F.R. § 1.10:

1. A true and accurate copy of the Cover Sheet for the Application showing that 20 formal drawing sheets were included and the Express Mail signature and date on Page 2;
2. A true and accurate copy of a printout from www.usps.com with a tracking status that the package was **delivered** on November 26, 2004;
3. A true and accurate copy of 20 formal Drawing sheets included with the Application; and
4. A true and accurate copy of our return post card indicating that the Application was received by the USPTO and included 20 formal drawing sheets with the application.

This petition is being filed promptly after Applicant became aware that no filing date has been granted as indicated in the Notice of Incomplete Non-Provisional Application. Applicant respectfully requests the granting of November 25, 2003 as the filing date in view of that the Application was mailed with all required parts including the Drawings. Although the USPS did not complete the "date in" box on the Express Mail receipt (through no fault of Applicant), the tracking status print out evidences that the complete Application was mailed via Express Mail on November 25, 2003, as the USPTO received the same on November 26,

2003 (*i.e.*, one day after Applicant mailed the Application). Accordingly, Applicant respectfully requests the granting of November 25, 2003 as the filing date.

The Commissioner is authorized to charge the required fee of \$130 to Deposit Account No. 50-0220 for consideration of the present petition. However, Applicant concurrently hereby petitions for a refund of the petition fee (\$130) on the basis that Applicant properly followed the requirements of 37 CFR § 1.10 and the USPTO failed to accord the proper filing date under MPEP § 505. Thus the need to file this petition is due to error on the part of the USPTO. The Commissioner is authorized to charge any deficiency, credit any overpayments or refunds to Deposit Account No. 50-0220.

Respectfully submitted,

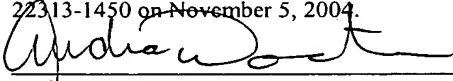


Robert N. Crouse
Registration No. 44,635

Attorney For Applicant
USPTO Customer No. 20792
Myers Bigel Sibley & Sajovec
Post Office Box 37428
Raleigh, North Carolina 27627
Telephone: 919/854-1400
Facsimile: 919/854-1401

Certificate of Mailing under 37 CFR 1.8 (or 1.10)

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: MS Petitions, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on November 5, 2004.



Audra Wooten



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ATTY DOCKET NO.: 5649-1225

DATE: November 25, 2003

**UTILITY PATENT APPLICATION TRANSMITTAL LETTER
AND FEE TRANSMITTAL FORM (37 CFR § 1.53(b))**

Mail Stop PATENT APPLICATION
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Transmitted herewith for filing under 37 CFR § 1.53(b) is:

- ☒ a patent application
☐ a Continuation ☐ a Divisional ☐ a Continuation-in-Part (CIP) Application of prior application no.: _____; filed _____, the disclosure of which is incorporated herein by reference in its entirety.
☐ and claims the benefit of Provisional Application No. _____; filed _____.

Inventor(s) or Application Identifier:

Byeong-chan Lee
Yong-hoon Son

Si-young Choi
In-soo Jung

Jong-ryeol Yoo
Deok-hyung Lee

Entitled: **FERROELECTRIC MEMORY DEVICES INCLUDING PROTECTION ADHESION LAYERS AND METHODS OF FORMING THE SAME**

Myers Bigel Sibley & Sajovec, P.A.
P. O. Box 37428
Raleigh, North Carolina 27627
Telephone: (919) 854-1400
Facsimile: (919) 854-1401
Customer No. 20792

Enclosed are:

1. ☒ Application Transmittal Letter and Fee Transmittal Form (*A duplicate is enclosed for fee processing*)
2. ☒ 24 pages of Specification (including 26 claims)
3. ☒ 20 sheets of Formal Drawings (35 USC 113)
4. ☒ Oath or Declaration
 - a. ☒ newly executed (*original or copy*)
 - b. ☐ copy from prior application (37 CFR 1.63(d) (*for continuation/divisional*) [Note Box 6 Below])
 - c. ☐ **DELETION OF INVENTOR(S)** (*Signed statement deleting inventor(s) named in the prior application*)
5. ☐ Application Data Sheet. See 37 CFR 1.76
6. ☐ Incorporation By Reference (*useable if box 4b is checked*)

The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.

7. ☐ Microfiche Computer Program (*Appendix*)
8. ☒ Assignment papers (*cover sheet(s) and document(s)*)
9. ☐ Applicant claims small entity status. See 37 CFR § 1.27.
10. ☐ Information Disclosure Statement, PTO-1449, and _____ references cited
11. ☐ Preliminary Amendment (*Please enter all claim amendments prior to calculating the filing fee.*)
12. ☐ English Translation Document
13. ☐ Certified Copy of _____ Application No. _____ ; Filed
14. ☐ Sequence Listing/ Sequence Listing Diskette
 - a. ☐ computer readable copy
 - b. ☐ paper copy
 - c. ☐ statement in support
15. ☐ An Associate Power of Attorney
16. ☒ Return Receipt Postcard (MPEP 503) (*Should be specifically itemized*)
17. ☐ Deletion of Inventor(s) (Signed statement attached deleting inventor(s) name in the prior application. See 37 CFR 1.63(d)(2) and 1.33(b).
18. ☐ Nonpublication Request under 35 U.S.C. 122(b)(2)(B)(i). Applicant must attach form.
19. ☐ Other:

The fee has been calculated as shown below:

	Column 1 No. Filed	Column 2 No. Extra	Small Entity Rate Fee	Large Entity Rate Fee
BASIC FEE			\$385.00	\$ 770.00
TOTAL CLAIMS	26 - 20 =	6	x 09 = \$	x 18 = \$108.00
INDEP CLAIMS	3 - 3 =	0	x 43 = \$	x 86 = \$ - 0 -
<input type="checkbox"/> MULTIPLE Dependent Claims Presented			+ 145 = \$	+ 290 = \$
<i>If the difference in Col. 1 is less than zero, Enter "0" in Col. 2</i>			Total \$	Total \$878.00

- ☐ A check in the amount of \$ _____ to cover the filing fee is enclosed.
- ☒ A check in the amount of \$878.00 is enclosed to cover the filing fee and a check in the amount of \$40.00 is enclosed for the Assignment Recordation fee.
- ☐ Please charge my Deposit Account No. 50-0220 in the amount of \$ _____
- ☒ The Commissioner is hereby authorized to credit overpayments or charge the following fees associated with this communication to Deposit Account No. 50-0220:
- a. ☒ Additional filing fees under 37 CFR 1.16 for presentation of extra claims.
 - b. ☒ Additional patent application processing fees under 37 CFR 1.17.

Respectfully submitted,

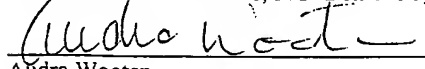

Robert N. Crouse
Registration No. 44,635

CERTIFICATE OF EXPRESS MAILING

Express Mail Label No. EV 318417444 US

Date of Deposit: November 25, 2003

I hereby certify that this correspondence is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR § 1.10 on the date indicated above and is addressed to: Mail Stop PATENT APPLICATION, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.


Audra Wooten



Track & Confirm

Current Status

You entered EV31 8417 444U S

Your item was delivered on November 26, 2003 at 10:53am in ALEXANDRIA, VA 22313. The item was signed for by V REGISTER. Additional information for this item is stored in files offline.

Notification Options

► Request Proof of Delivery [What is this?](#)

[Go >](#)

Restoration Options

► Restore Offline Item [What is this?](#)

[Go >](#)

Track & Confirm

Enter label number:

[Track & Confirm FAQs](#)



POSTAL INSPECTORS
Preserving the Trust

[site map](#) [contact us](#) [government services](#)
Copyright © 1999-2002 USPS. All Rights Reserved. [Terms of Use](#) [Privacy Policy](#)



Fig. 1

(PRIOR ART)

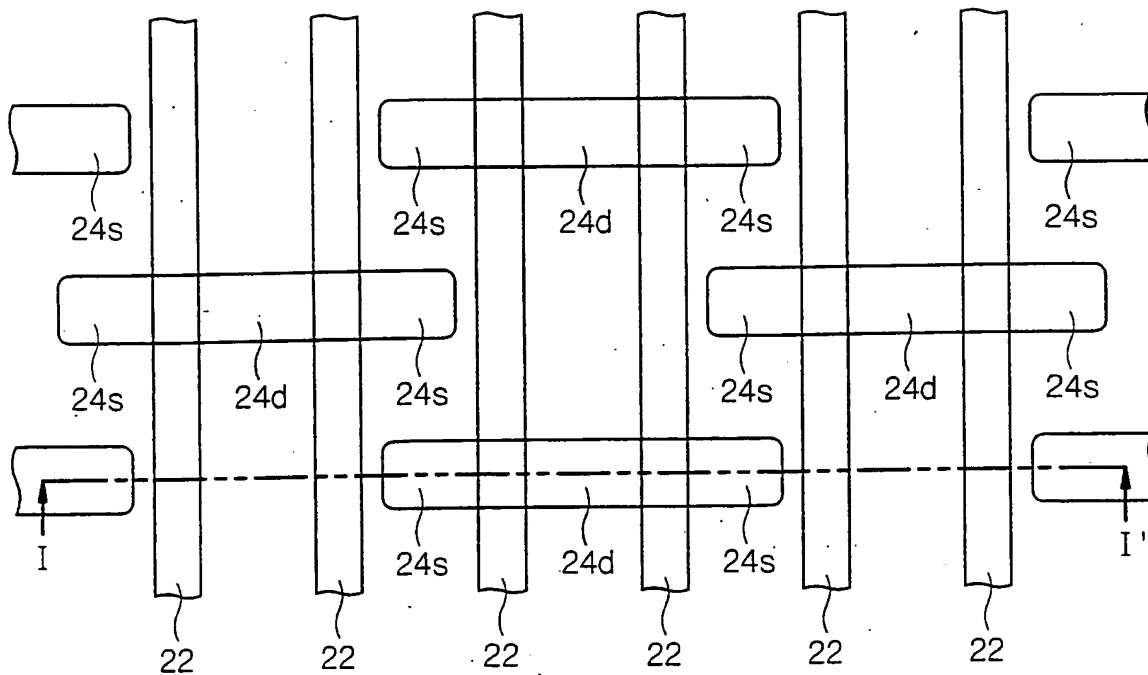


Fig. 2

(PRIOR ART)

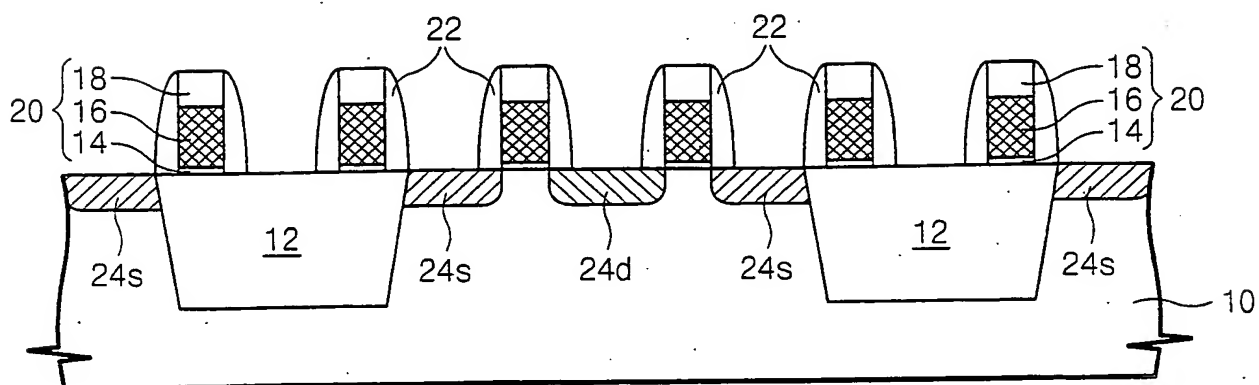


Fig. 3

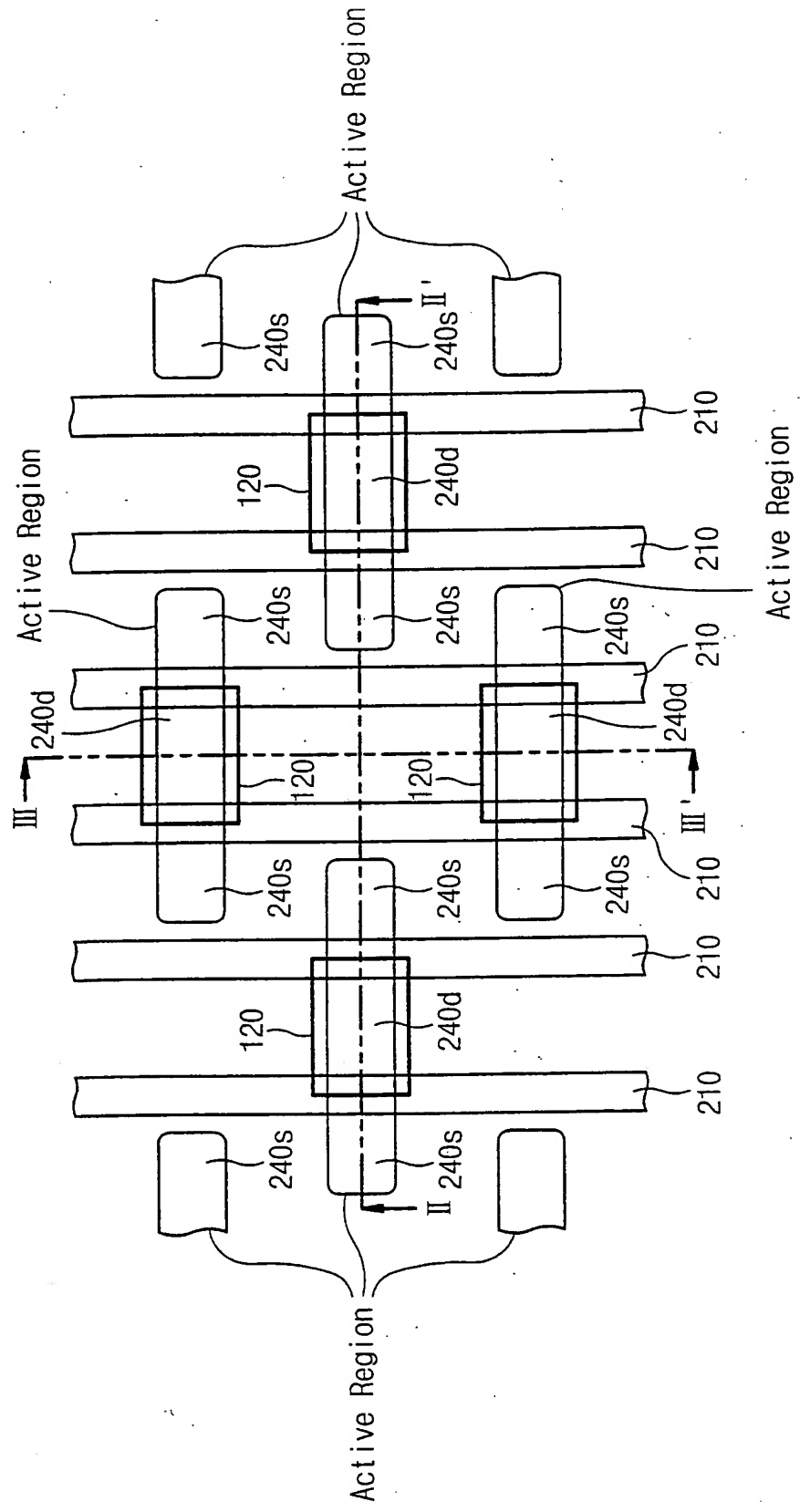


Fig. 4

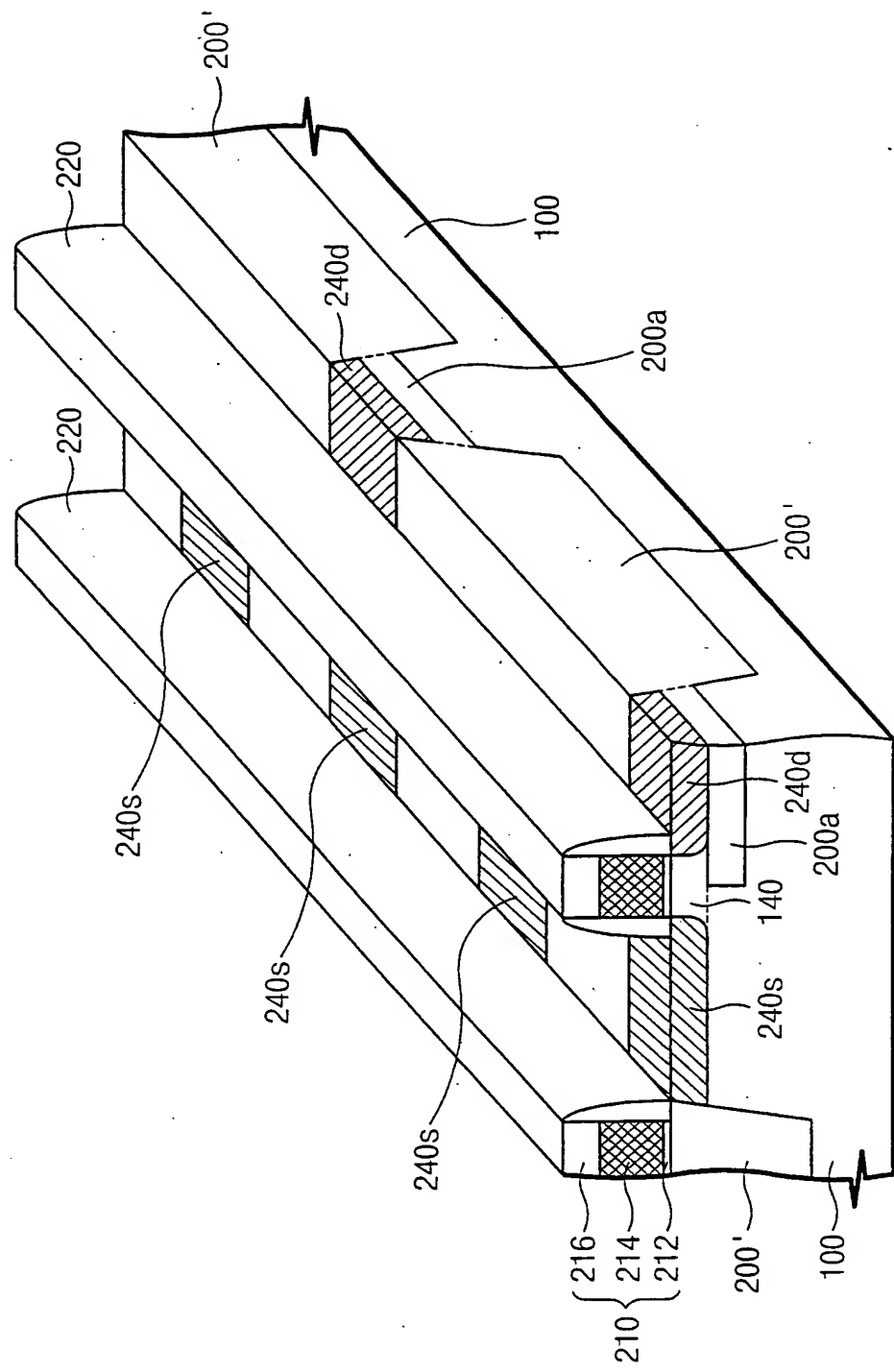


Fig. 5A

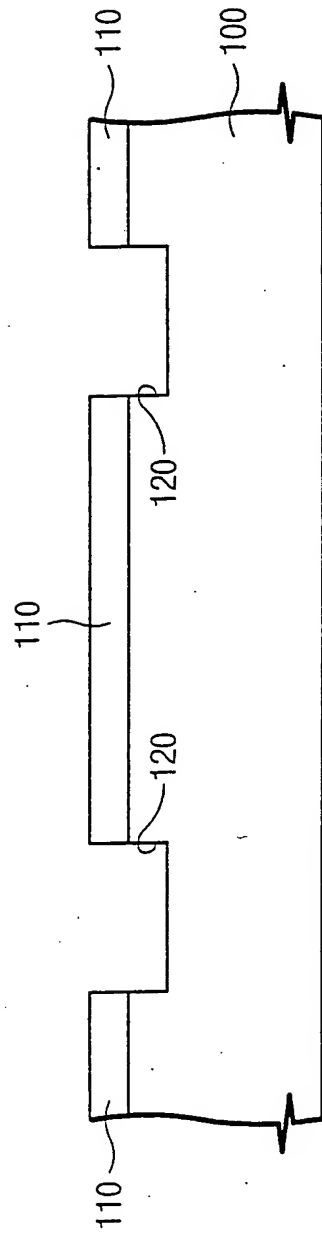


Fig. 5B

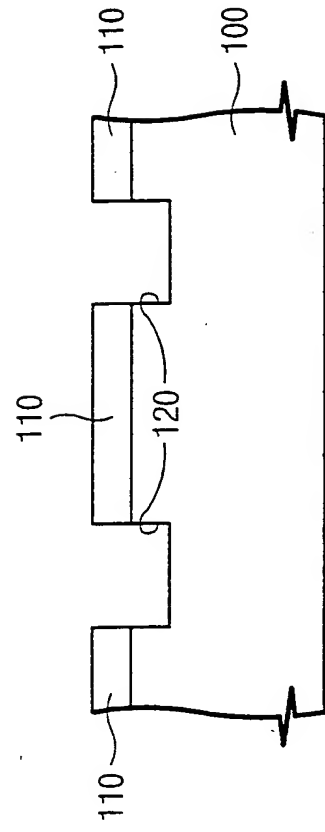


Fig. 6A

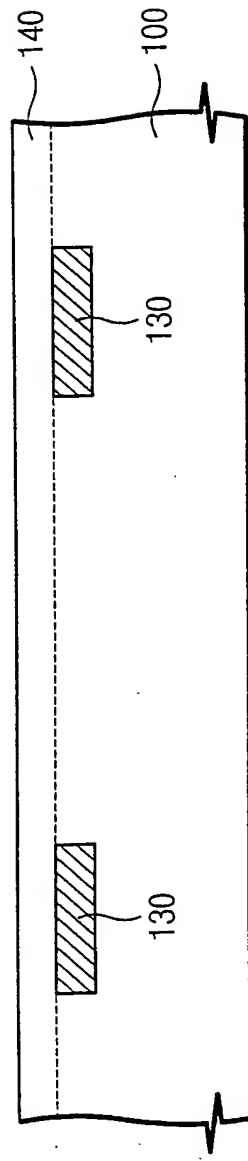


Fig. 6B

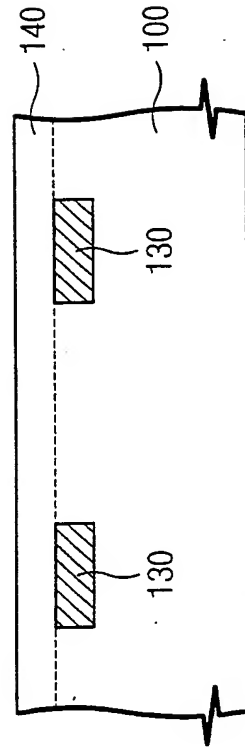


Fig. 7A

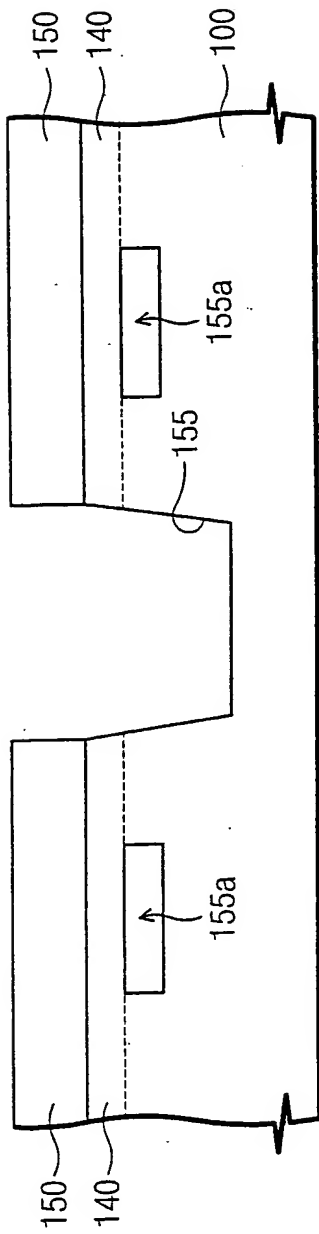


Fig. 7B

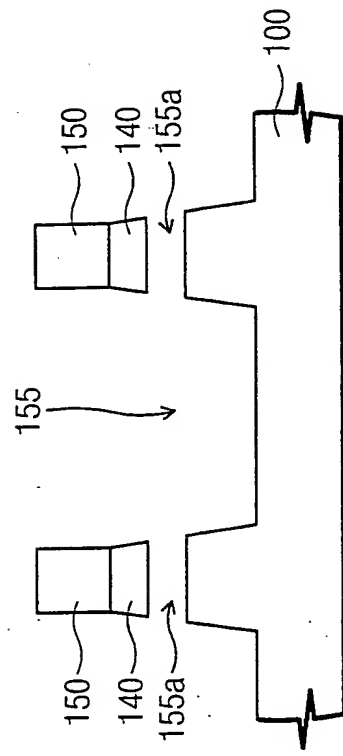


Fig. 8A

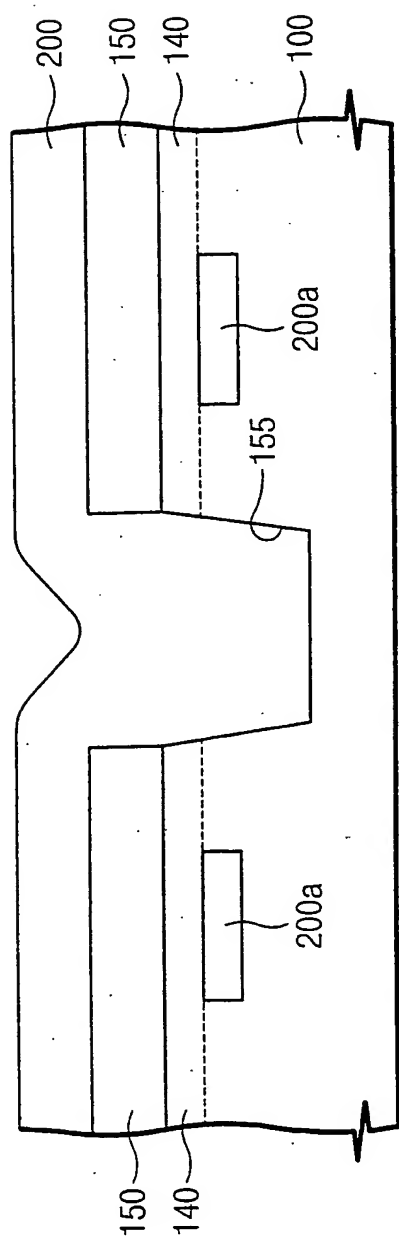


Fig. 8B

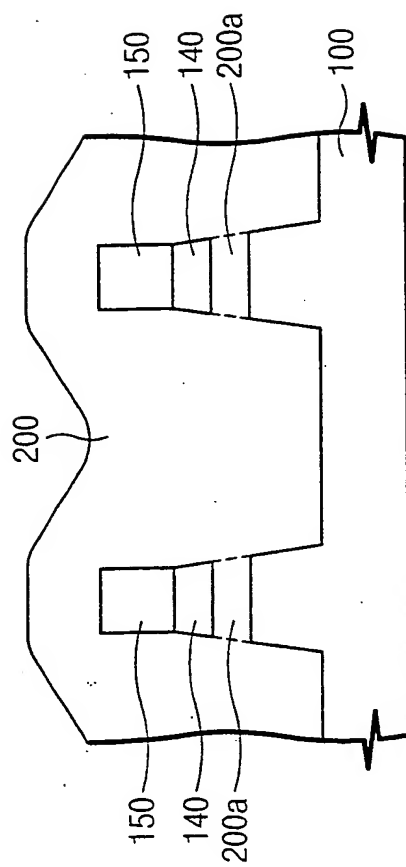


Fig. 9A

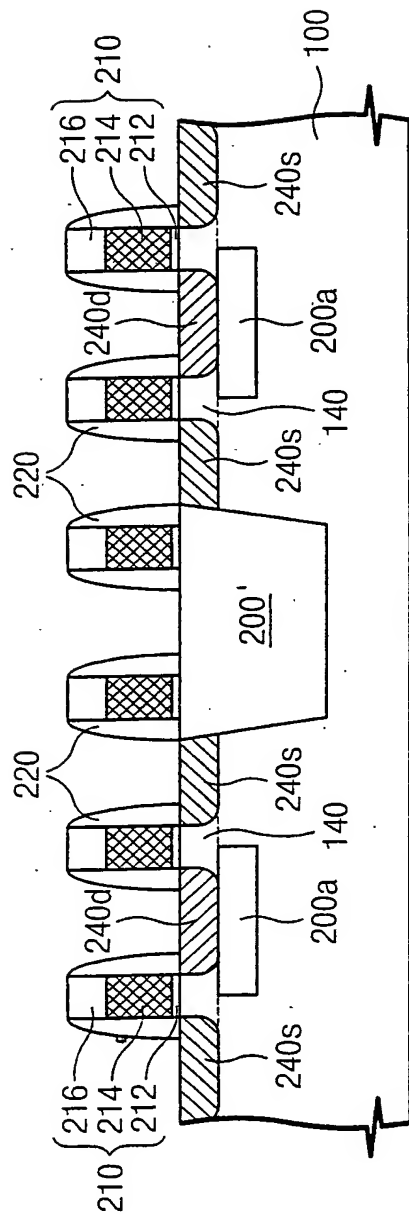


Fig. 9B

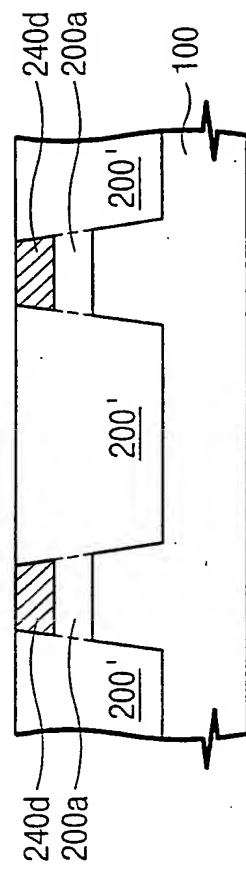


Fig. 10

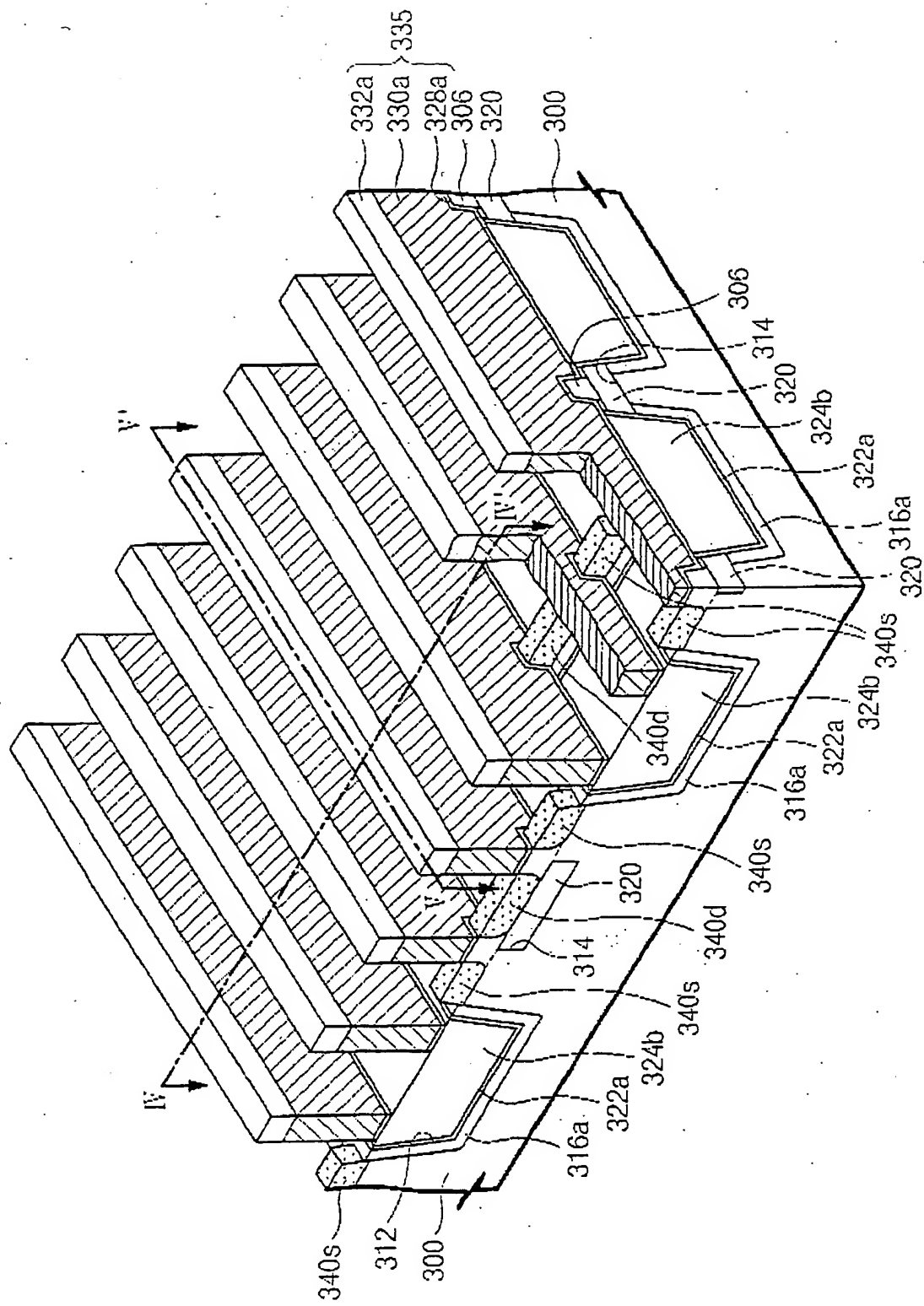


Fig. 11A

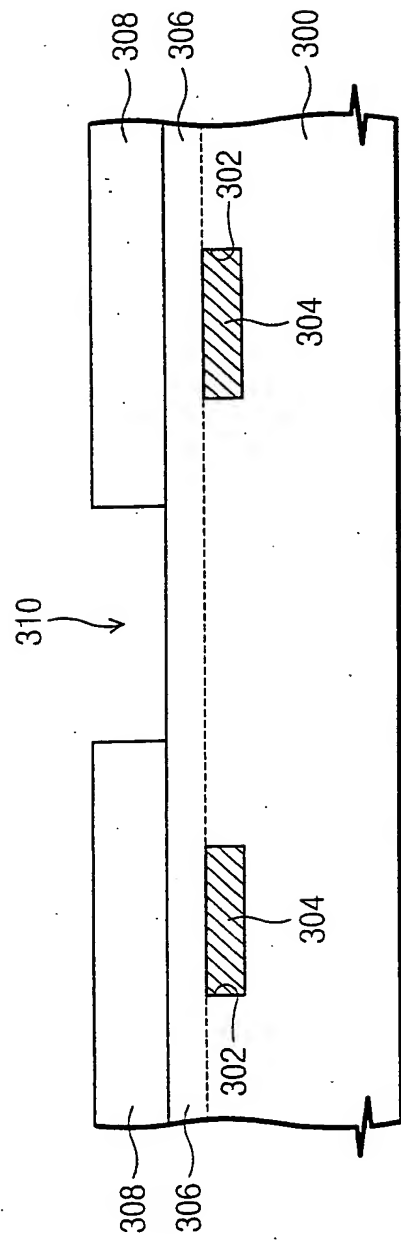


Fig. 11B

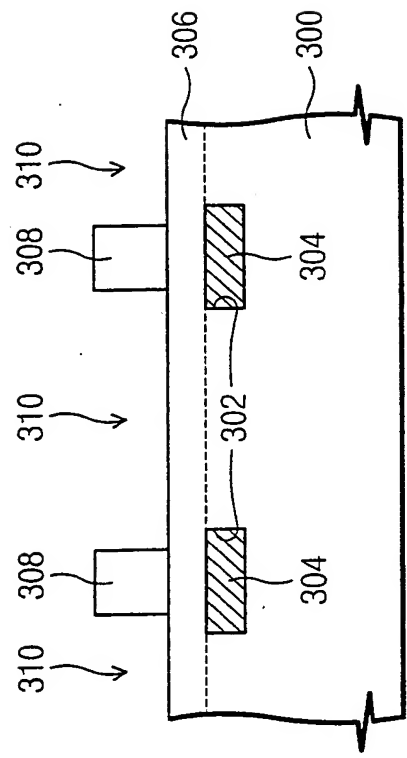


Fig. 12A

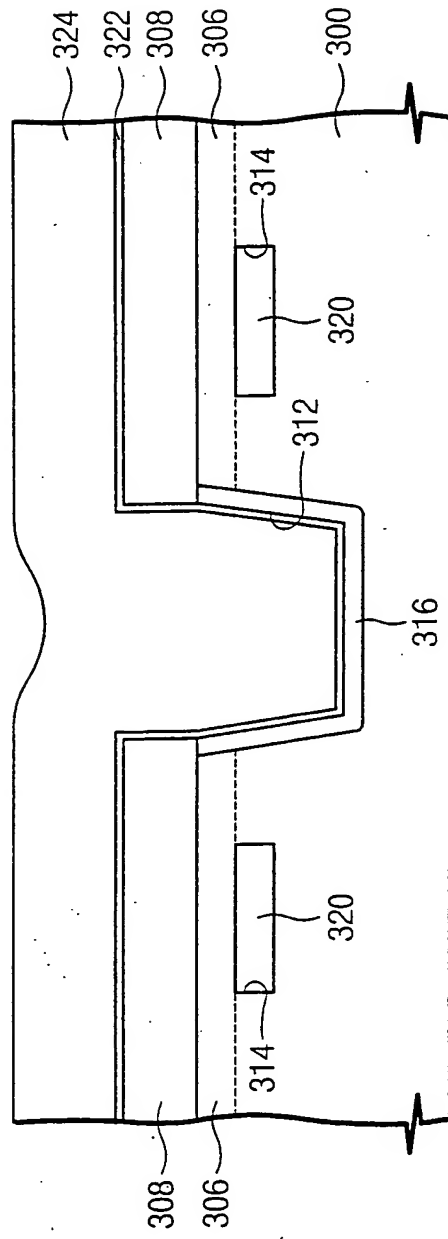


Fig. 12B

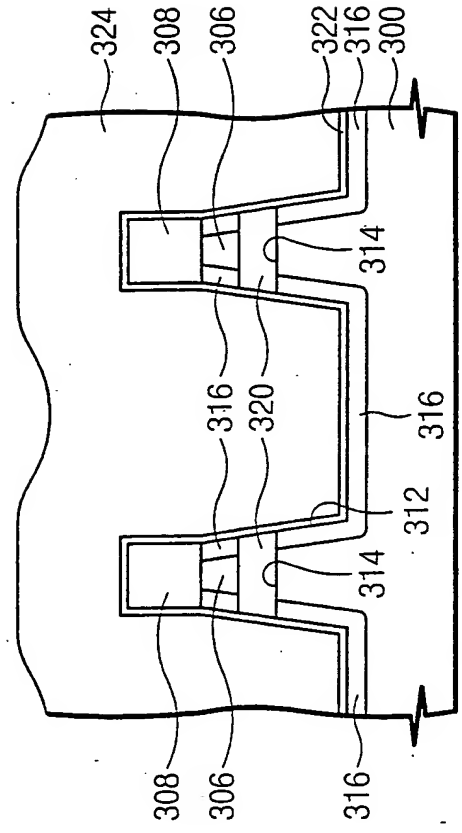


Fig. 12C

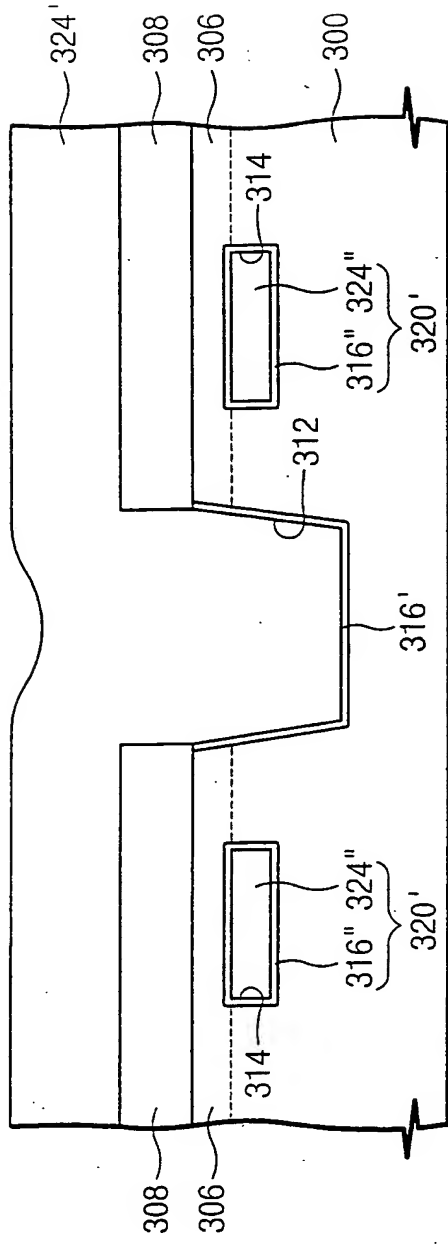


Fig. 12D

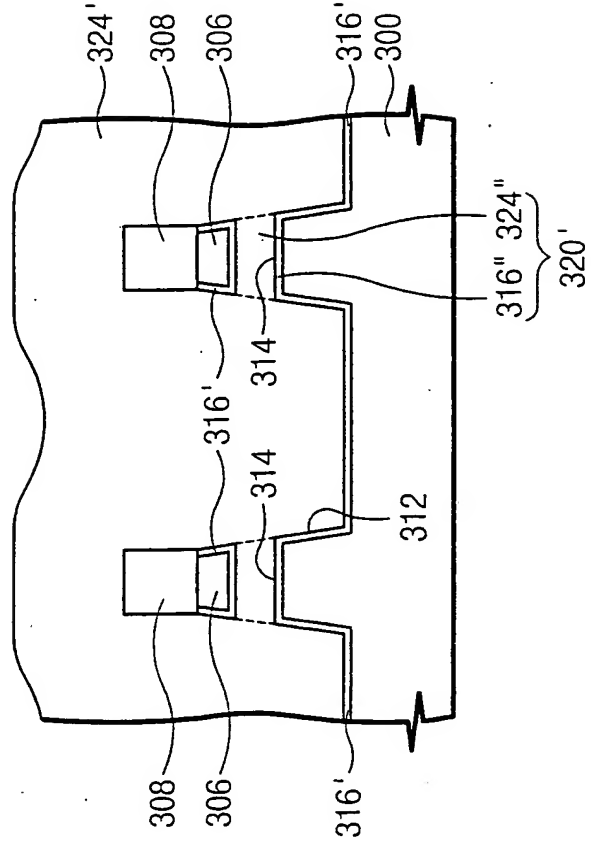


Fig. 13A

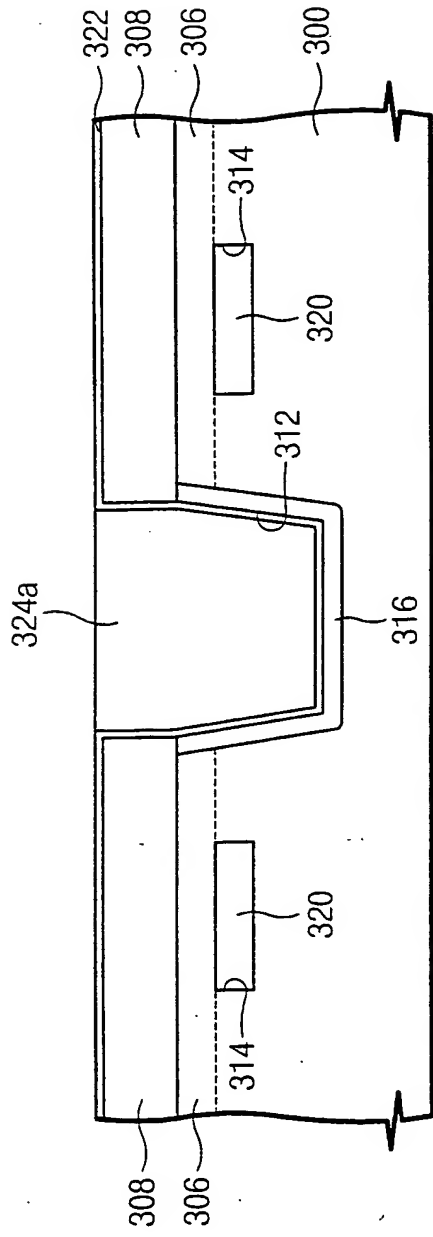


Fig. 13B

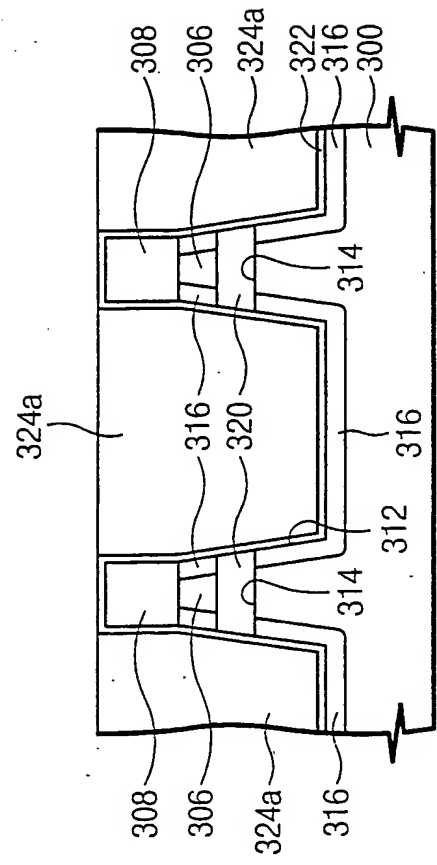


Fig. 14A

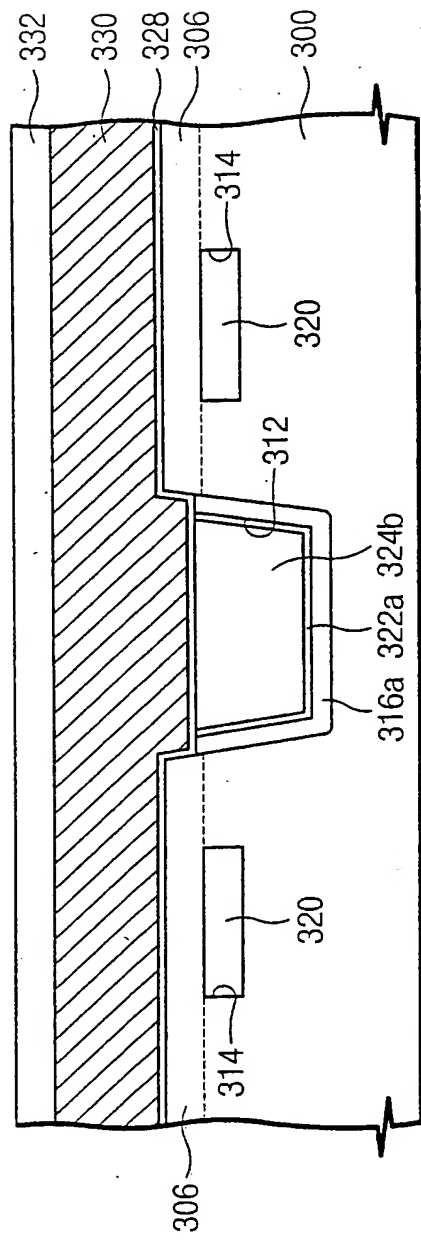


Fig. 14B

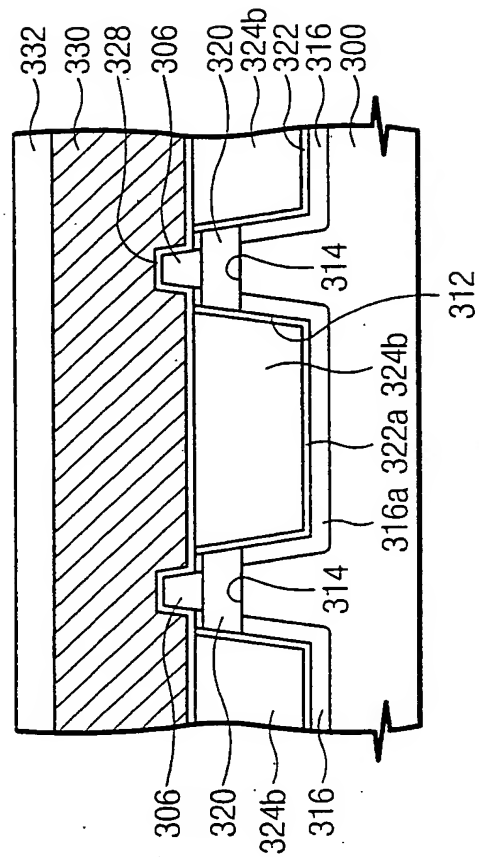


Fig. 15A

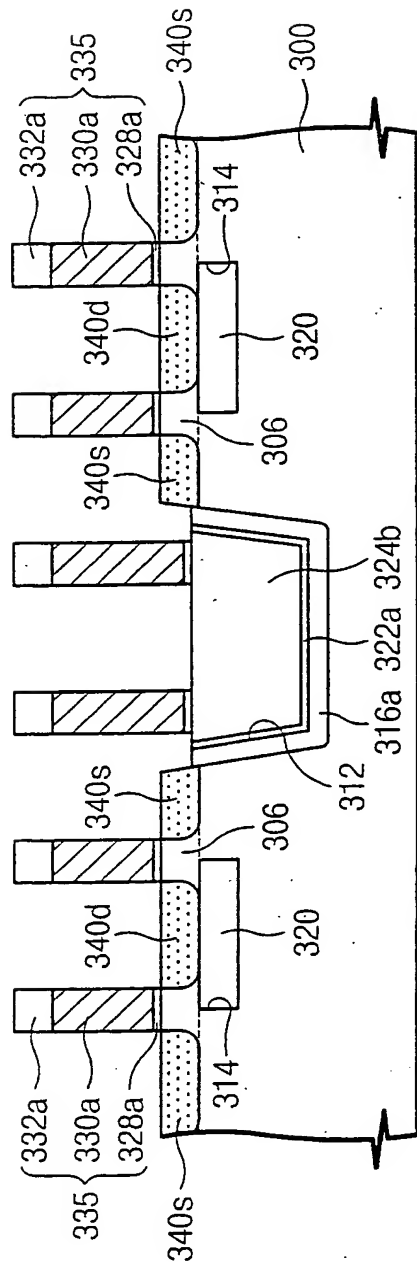


Fig. 15B

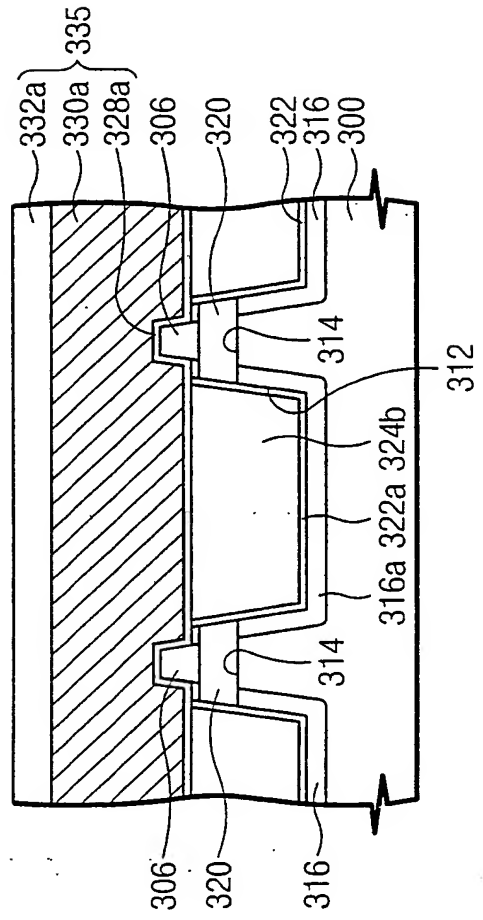


Fig. 17A

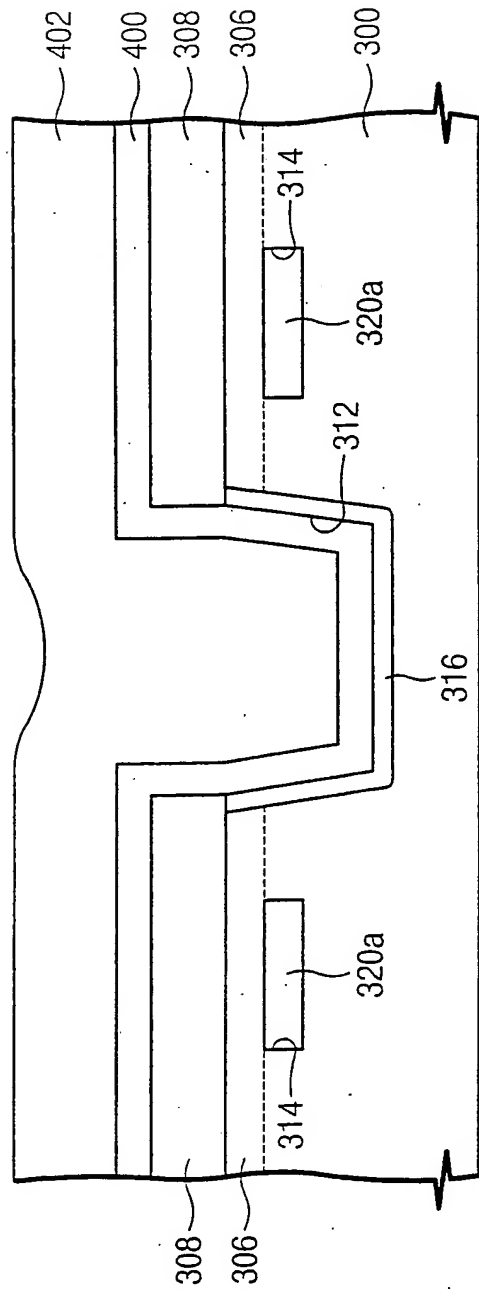


Fig. 17B

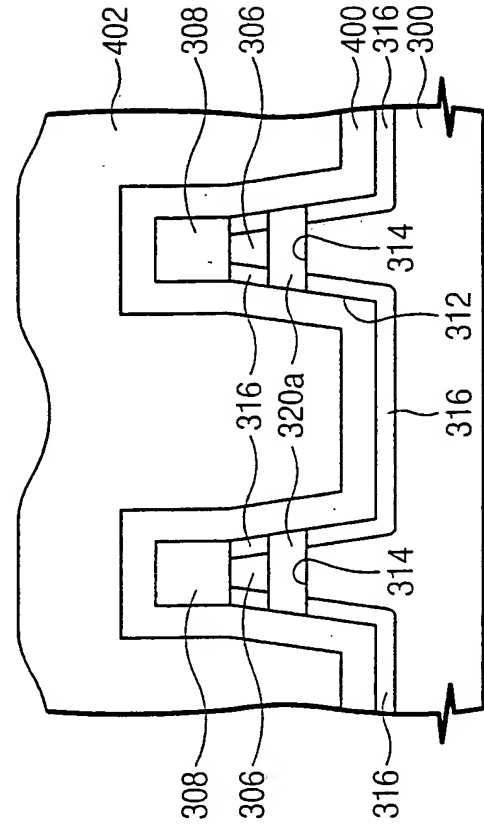


Fig. 18A

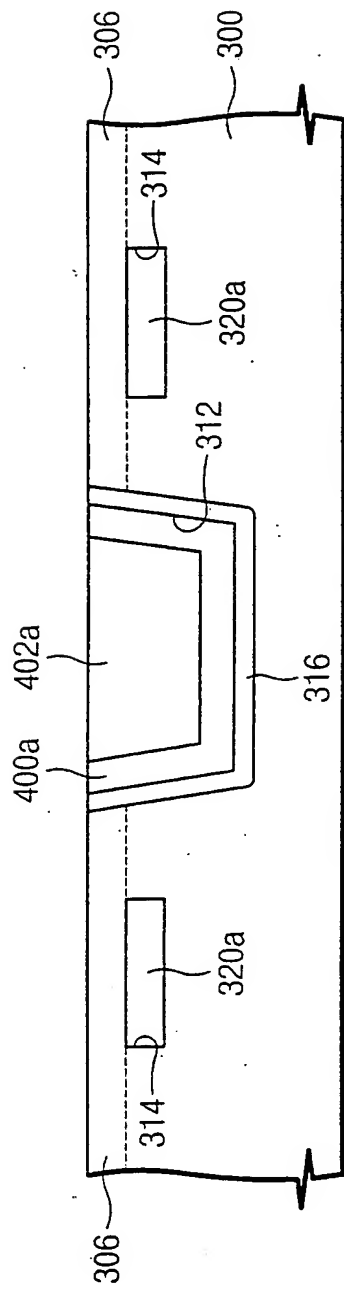


Fig. 18B

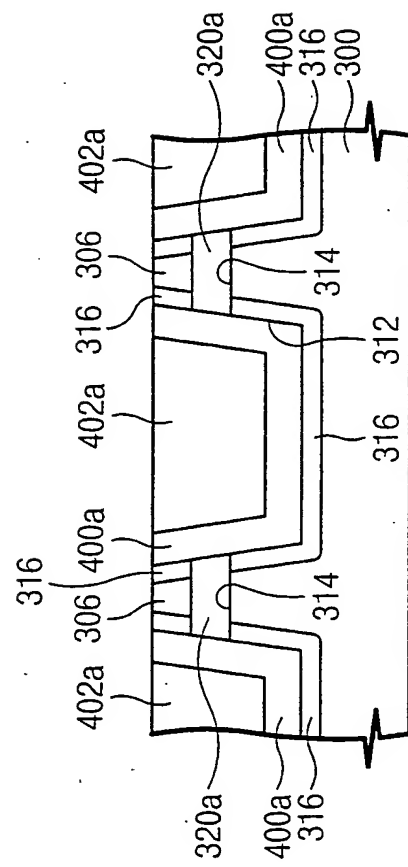


Fig. 19A

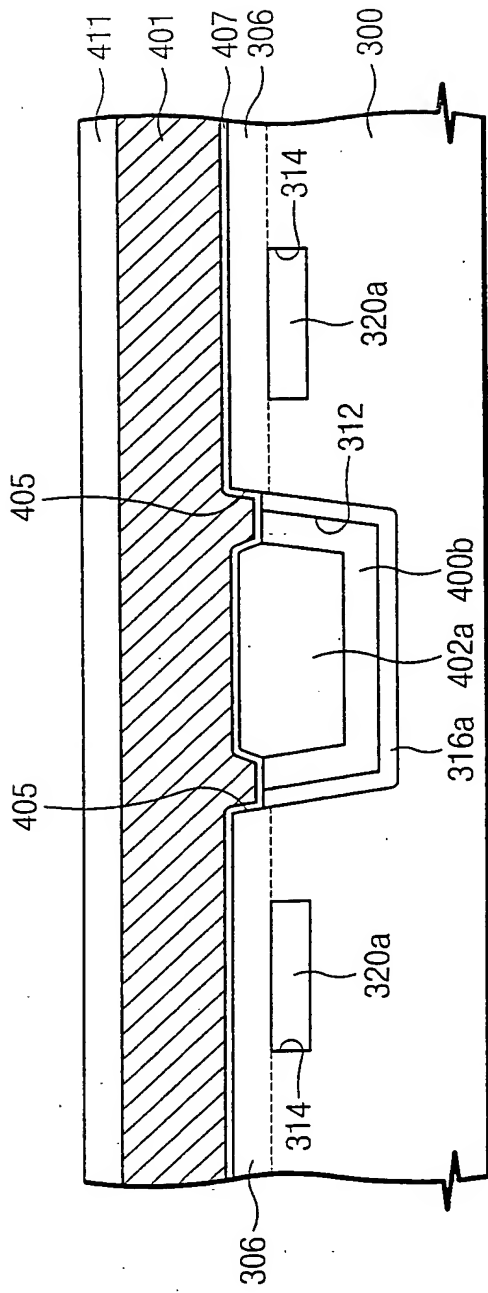


Fig. 19B

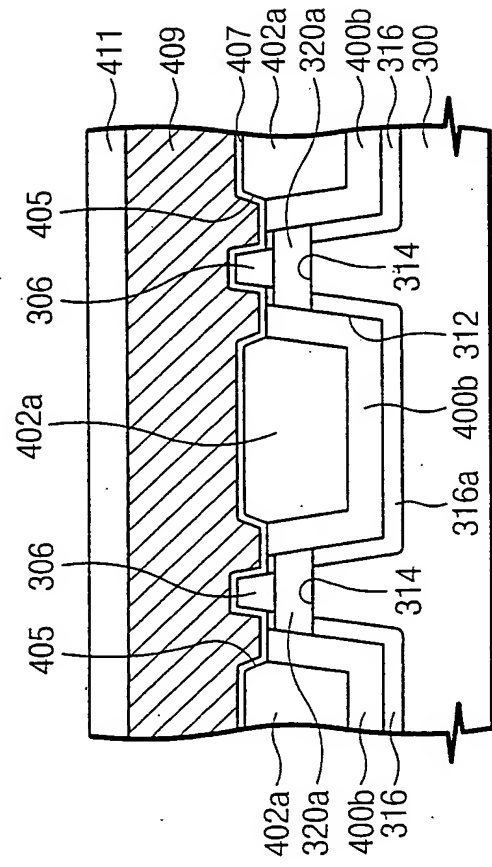


Fig. 20A

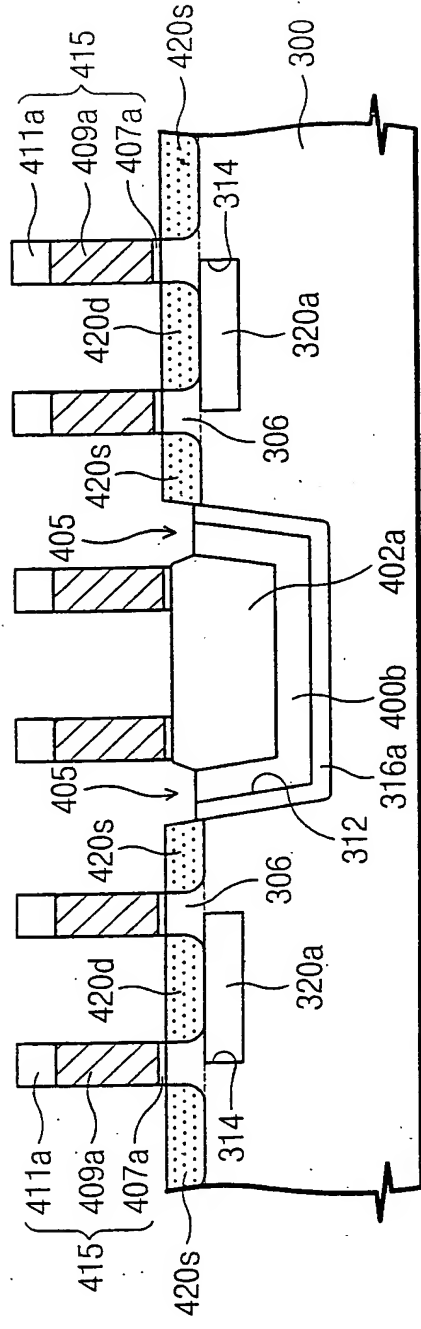
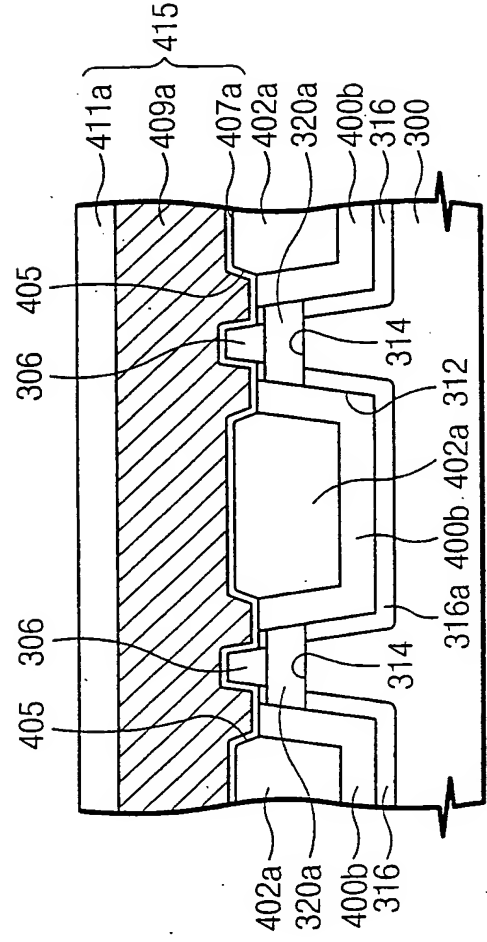


Fig. 20B





Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RNC/labw

Date: 11-25-03
Doc. No. 5649-1225
Serial No. TBA
Inventor: Lee et al.

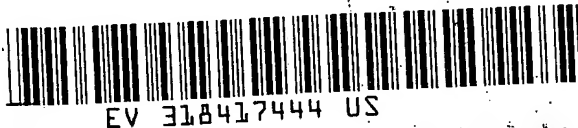
Sir: Kindly acknowledge receipt of the accompanying items listed below
by placing your receiving stamp hereon and return mailing:

<input checked="" type="checkbox"/> Application Transmittal and:	<input checked="" type="checkbox"/> Check \$ <u>878.00</u>
<input checked="" type="checkbox"/> Specification pages <u>24</u>	<input type="checkbox"/> IDS & PTO-1449 & <u> </u> refs.
<input checked="" type="checkbox"/> No. of Claims <u>26</u>	<input type="checkbox"/> Amendment & Amend. Transmittal
<input checked="" type="checkbox"/> Declaration & POA	<input type="checkbox"/> Preliminary Amendment
<input checked="" type="checkbox"/> Assignment and Fee	<input type="checkbox"/> Issue Fee
<input type="checkbox"/> Small Entity Statement	<input type="checkbox"/> Brief
<input checked="" type="checkbox"/> Formal Drawings/ <u>20</u> sheets	<input type="checkbox"/> Appeal
<input type="checkbox"/> Associate Power of Attorney	<input type="checkbox"/> Submittal of Priority Doc.
<input checked="" type="checkbox"/> Exp. Mail <u> </u> 1st Class Mail	

Other:

17548 U.S. PTO
10/722193
112603

Respectfully submitted,
MYERS BIGEL SIBLEY & SAJOVEC, P.A.
Attorneys for Applicant



EV 318417444 US



Customer Copy
Label 11-F June 2002

Post Office To Addressee

ORIGIN (POSTAL USE ONLY)

PO ZIP Code <u>27622</u>	Day of Delivery <input checked="" type="checkbox"/> Next <input type="checkbox"/> Second	Flat Rate Envelope <input type="checkbox"/>
Date In Mo. <u> </u> Day <u> </u> Year <u> </u>	<input checked="" type="checkbox"/> 12 Noon <input type="checkbox"/> 3 PM	Postage \$ <u>13.65</u>
Time In <input type="checkbox"/> AM <input type="checkbox"/> PM	Military <u> </u>	Return Receipt Fee
Weight lbs. <u> </u> ozs. <u> </u>	Int'l Alpha Country Code <u> </u>	COD Fee <u> </u> Insurance Fee <u> </u>
No Delivery <input type="checkbox"/> Weekend <input type="checkbox"/> Holiday	Acceptance Clerk Initials <u> </u>	Total Postage & Fees \$ <u>13.65</u>

DELIVERY (POSTAL USE ONLY)

Delivery Attempt	Time <input type="checkbox"/> AM <input type="checkbox"/> PM	Employee Signature
Mo. <u> </u> Day <u> </u>		
Delivery Attempt	Time <input type="checkbox"/> AM <input type="checkbox"/> PM	Employee Signature
Mo. <u> </u> Day <u> </u>		
Delivery Date	Time <input type="checkbox"/> AM <input type="checkbox"/> PM	Employee Signature
Mo. <u> </u> Day <u> </u>		
<input type="checkbox"/> WAIVER OF SIGNATURE (Domestic Only) Additional merchandise insurance is void if waiver of signature is requested. I wish delivery to be made without obtaining signature of addressee or addressee's agent (if delivery employee judges that article can be left in secure location) and I authorize that delivery employee's signature constitutes valid proof of delivery.		
NO DELIVERY <input type="checkbox"/> Weekend <input type="checkbox"/> Holiday		
Customer Signature <u> </u>		

CUSTOMER USE ONLY

METHOD OF PAYMENT:

Express Mail Corporate Acct. No.

X276081

FROM: (PLEASE PRINT)

PHONE 919, 554 1400

MYERS BIGEL SIBLEY & SAJOVEC
PO BOX 37428
RALEIGH NC 27627-7428

RNC/labw 5649-1225

TO: (PLEASE PRINT)

PHONE

MS Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PRESS HARD
You are making 3 copies

FOR PICKUP OR TRACKING CALL 1-800-222-1811 www.usps.com





UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
 Address: COMMISSIONER FOR PATENTS
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
 www.uspto.gov

APPLICATION NUMBER	FILING OR 371 (c) DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
10/722,193	11/26/2003	Byeong-chan Lee	5649-1225

Robert N. Crouse
 Myers Bigel Sibley & Sajovec
 Post Office Box 37428
 Raleigh, NC 27627



CONFIRMATION NO. 6744

FORMALITIES LETTER



OC000000013769477

Date Mailed: 09/09/2004

NOTICE OF INCOMPLETE NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

A filing date has NOT been accorded to the above-identified application papers for the reason(s) indicated below.

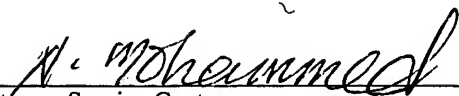
All of the items noted below **and a newly executed oath or declaration covering the items must** be submitted within **TWO MONTHS** of the date of this Notice, unless otherwise indicated, or proceedings on the application will be terminated (37 CFR 1.53(e)). Replies should be mailed to: Mail Stop Missing Parts, Commissioner for Patents, P.O. Box 1450, Alexandria VA 22313-1450.

The filing date will be the date of receipt of all items required below, unless otherwise indicated. Any assertions that the item(s) required below were submitted, or are not necessary for a filing date, must be by way of petition directed to the attention of the Office of Petitions accompanied by the \$130.00 petition fee (37 CFR 1.17(h)). If the petition states that the application is entitled to a filing date, a request for a refund of the petition fee may be included in the petition. Petitions should be mailed to: Mail Stop Petitions, Commissioner for Patents, P.O. Box 1450, Alexandria VA 22313-1450.

- The application was deposited without drawings. 35 U.S.C. 113 (first sentence) requires a drawing "where necessary for the understanding of the subject matter sought to be patented." *Applicant should reconsider whether the drawings are necessary under 35 U.S.C. 113 (first sentence).*

Replies should be mailed to: Mail Stop Missing Parts
 Commissioner for Patents
 P.O. Box 1450
 Alexandria VA 22313-1450

*A copy of this notice **MUST** be returned with the reply.*


 Customer Service Center
 Initial Patent Examination Division (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE